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10/054,156	11/13/2001	Kelli H. Kennedy	10011462-1	5327
22879 7590 09/10/2008 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400				
EXAMINER				
QIN, YIXING				
ART UNIT		PAPER NUMBER		
2625				
NOTIFICATION DATE		DELIVERY MODE		
09/10/2008		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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### Office Action Summary

**Application No.**

10/054,156

**Applicant(s)**

KENNEDY ET AL.

**Examiner**

Yixing Qin

**Art Unit**

2625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 June 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

The first argument is regarding the obviousness of whether the printing agent is launched by an application or a general printer driver. Again, the launching of a particular program is basically a call function written into software of a particular program. Still, both an application and a general printer driver are still programs programmed to perform certain functions. In this case, a call function is placed in one of the application or the general printer driver. The location of this function would be obvious depending on the needs of the user.

The second argument is the distributed printing properties window cd12 as shown in Fig. 35 of Iwata is not a printing agent and is part of the virtual printer driver 110. The arguments also state that it does not perform any querying for available printers. The distributed printing properties window cd12 may be a part of the virtual driver, but it still has to be launched in order to show printers that are part of the network, and thus act as an agent for facilitating printing. Also, the Neuhard reference is being brought in to show that a program can be used to query for available printers. Neuhard is now used instead in combination with the Iwata reference to give the Iwata invention the ability to query for available printed and to display those printers.

The third argument is regarding the combination of reference. Even though the Iwata reference allows printing to a single printer, the other references, Neuhard, and Marbry are used in combination to show how to query for printer(s) and for downloading appropriate files for converting print data. Also, in response to applicant's argument that

the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). Since printing to either one or a plurality of printer is well known, the motivation for the combination would not have been based solely on hindsight reasoning.

Please see the rejection below for more details.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

I. Claims 1, 2, 6-16, 18-27, 31 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al (U.S. Pub No. 20020163665 A1) in view of Marbry et al (U.S. Patent No. 5,692,111) and further in view of Neuhard et al (U.S. Patent No. 6,335,795)

Regarding claims 1, 9, 15, and 23, Iwata discloses a method of determining information regarding at least one physical printer available to receive a print job from a client computer, comprising:

calling a general printer driver, through which the print job is passed, directly from an application executed by the client computer; (Fig 2, items 100, 110)

receiving an identification of the at least one available printer from the server; (Fig. 5)

wherein the general printer driver is accessible as a destination printer of the application in a print menu, and wherein the general printer driver is configured to launch a printing agent different from the general printer driver (Fig. 35) to perform the transmitting when the general printer driver is selected as the destination printer in the print menu. (Fig 5, item IC4 is discloses as the virtual printer driver in P[0153]).

It does not explicitly disclose "transmitting a query from the client computer to a server via a network for an identification of the at least one available physical printer; selecting a single one of the identified physical printers to receive the print job; after the selecting, downloading from the server a file used to convert print data into a format specific to the selected physical available printer;"

However, Iwata discloses in Fig. 35 that a printing agent is launched that identifies various available printers. Neuhard discloses in Fig. 14a and column 13, line 58-column 14, line 9 that clients can query a server for available printers. Neuhard indeed uses a status object 182 to help facilitate the querying of information. One of

ordinary skill would realize that such a object can be incorporated into Fig. 35 of Iwata to help the querying process. Marbry discloses this in Fig. 3, and column 3, lines 44-65 the downloading of a file to convert data.

All references are combinable because they are in the art of printing to selected printers on a network

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used the technique in Marbry for installing drivers for a single printer and the Neuhard technique for printer discovery.

The motivation would have been to allow users to find and to print to a single printer instead of a choosing a plurality of printers to print to like in the Iwata reference.

Therefore, it would have been obvious to combine all references to obtain the invention as specified.

Regarding claims 2, 10, Iwata discloses further comprising:

launching a printing agent with the general printer driver, the printing agent generating the query transmitted from the client computer to the server for the identification. (Fig. 35, item id113)

Regarding claims 6, 20, 25, Iwata discloses wherein the identification of the at least one available printer received from the server is a list of printers. (Fig. 5)

Regarding claims 7, 13, 21, 26, Iwata discloses wherein the list of printers includes information from one or more of a physical location, a printer capability and a network address. (Figs. 31-34)

Regarding claims 8, 14, 22, 27 Iwata discloses further comprising displaying the identification of the at least one available printer for the user to select the selected one of the at least one available printer. (Figs. 31-34)

Regarding claim 16, Iwata discloses wherein the general printer driver code is called from the application in response to a print command entered by a user. (Fig. 2 items 100 and 110)

Regarding claim 31, Iwata discloses a method of determining information regarding at least one printer available to receive a print job from a client computer, comprising:

providing a general printer driver, on the client computer accessible as a destination printer in a print menu of an application executed by the client computer; (Fig. 2 and Fig 5, item IC4)

selecting the general printer driver as the destination printer directly from an application; (Fig. 5)

responsive to the selecting, launching from the general printer driver a printing agent on the client computer, the printing agent different from the general printer driver; (Fig. 3)

transmitting a query from the printing agent to a server via a network for an identification of the at least one available printer; (Fig. 35, item id113 – also note from claim 1 above, that Neuhard discloses in Fig. 14a and column 13, line 58-column 14, line 9 that clients can query a server for available printers. Neuhard indeed uses a status object 182 to help facilitate the querying of information. One of ordinary skill would realize that such a object can be incorporated into Fig. 35 of Iwata to help the querying process. )

receiving at the client computer an identification of the at least one available printer from the server in response to the query; (Fig. 35, item id 113)

selecting, via the general printer driver, one of the at least one available printer to print the print job; and (Fig. 35, item id 113 and Fig. 5)

downloading from the server to the client computer a file configured to convert the print job into a format specific to the selected printer; (Fig. 2, item 120 and P[0195]. Figs. 16 item S500 and P[315] discloses that the distributed printing utility does convert data to a specific format for a printer. Also, Marbry discloses this in Fig. 3, and column 3, lines 44-65 the downloading of a file to convert data.) and

printing the print job on the selected printer using the general printer driver and the downloaded file. (Fig. 2, item 60, 70, 80)



Regarding claim 32, Iwata discloses further comprising:

using the downloaded file, converting the print data into the format specific to the selected one of the at least one available printer; and  
printing the converted print data on the selected one of the physical printer.

Regarding claims 33, 35, 36 Iwata discloses the method according to claim 1, wherein the transmitting is performed after the calling. (Figs. 21-24 – Fig. 20 shows the printer tab, and where one can see there are listed printers for printing. This occurs after an user has selected the distributed printing icon – IC4 of Fig.5) (i.e. general printer driver) and is setting which printers to print to.

Regarding claim 34, Iwata discloses the method according to claim 1, wherein the selecting is performed by a user. (Fig. 5 is common printing window, one knows the user clicks a printer to print to).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

II. Claims 3 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al (U.S. Pub No. 20020163665 A1) in view of Marbry et al (U.S. Patent No. 5,692,111) in view of Neuhard et al (U.S. Patent No. 6,335,795) and further in view of Official Notice.

Regarding claims 3, 17 Iwata discloses a print system with downloadable print drivers.

It does not explicitly disclose "wherein the general printer driver is a PostScript printer driver."

However, the Examiner takes Official Notice that Postscript is well-known printing format.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have used a PostScript printing driver.

The motivation would have been to use a widely accepted format for compatibility reasons.

Therefore, it would have been obvious to use a PostScript driver in the Iwata invention to obtain the invention as specified.

III. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al (U.S. Pub No. 20020163665 A1) in view of Marbry et al (U.S. Patent No.

5,692,111) in view of Neuhard et al (U.S. Patent No. 6,335,795) and further in view of Gase et al (U.S. Patent No. 5,580,177).

Regarding claims 4, 11, 18, 24, Iwata discloses a distributed printing system with driver downloading features.

It does not explicitly disclose "wherein the downloaded file is a printer description file and the method further comprises overwriting a generic printer description file with the downloaded printer description file and converting application specific data to be printed to printer specific data using the downloaded printer description file."

However, Gase, discloses in column 4, lines 17-23 the ability to overwrite a printer driver with a newer one. One would understand that the new printer driver would be used to process/convert data to be printed. The printer driver would read on as a printer description file.

All references are combinable because both references are in the art of networked printing and providing drivers for printers.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have a system for updating drivers.

The motivation would be to have the most current driver available for compatibility and efficiency reasons.

Therefore, it would have been obvious to combine all references to obtain the invention as specified.

Regarding claims 5, 12, 19, Iwata discloses a distributed printing system with driver downloading features.

It does not explicitly disclose "a distributed printing system with driver downloading features wherein the generic printer description file is temporarily overwritten until completion of the conversion."

However, the use of the distributed printing utility 120 effectively acts in place of the virtual printer driver (shown in Fig. 4 of Iwata in detail) by processing and converting intermediate print data into final output print data for a particular printer. While there is no explicitly overwriting, the overwriting and restoring of older drivers has been known in the Windows XP operating system, where a built in feature to allow the rollback of an updated driver to an older one if the new one is deemed to be incompatible.

All references are combinable because both references are in the art of networked printing and providing drivers for printers.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of invention to have an system for updating drivers.

The motivation would be to have the most current driver available for compatibility and efficiency reasons.

Therefore, it would have been obvious to combine all references to obtain the invention as specified.

IV. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over Iwata et al (U.S. Pub No. 20020163665 A1) in view of Neuhard et al (U.S. Patent No. 6,335,795)

30. (Previously presented) A method of determining information regarding at least one printer available to receive a print job from a client computer, comprising:  
calling a general printer driver, through which a job is passed, directly from an application executed by the client computer; (Fig 2, items 100, 110)  
receiving an identification of the at least one available printer from the server;  
(Fig. 5)

downloading a file from the server used to convert print data into a format specific to a selected one of the at least one available printer; (Fig. 2, item 120 and P[0195]. Figs. 16 item S500 and P[315] discloses that the distributed printing utility does convert data to a specific format for a printer) and

wherein the general printer driver is accessible as a destination printer in a print menu of the application, and wherein the application is configured to launch a printing agent different from the general printer driver, to initiate the transmitting when the general printer driver is selected as the destination printer. (Fig 5, item IC4 is discloses as the virtual printer driver in P[0153])

It does not explicitly disclose "transmitting a query from the client computer to a server via a network for an identification of the at least one available printer; "

However, Neuhard discloses in Fig. 14a and column 13, line 58-column 14, line 9 that clients can query a server for available printers. This can be used in the Iwata distributed printing properties window in Fig. 35 to help find available printers.

Iwata and Neuhard are combinable because both are in the art of finding printers to print

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to have queried for available printers.

The motivation would have been to find which printers are ready to print or handle the capabilities of the job.

Therefore, it would have been obvious to combine Iwata and Neuhard to obtain the invention as specified.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yixing Qin whose telephone number is (571)272-7381. The examiner can normally be reached on M-F 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Moore can be reached on (571) 272-7437. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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YQ

/Edward L. Coles/  
Supervisory Patent Examiner, Art Unit 2625